

**SUPPLY CHAIN RISK MANAGEMENT PRACTICES AND  
PERFORMANCE OF COUNTY GOVERNMENT OF KISUMU, KENYA.**

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## DECLARATION

This research project is my original work and has not been presented for the award of degree in any other University or Institution for any other purpose.

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This research project has been submitted for examination with my approval as University Supervisor.

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## **DEDICATION**

I dedicate this project to the Almighty God for the gift of life and protection. He has provided to me and to my entire family. I also advance immense gratitude to my Father and Mother for being the pillar of my strength.

To my dear wife Sophia, for the sacrifices we have made together during the period of my studies.

To my wonderful children, may you be inspired by this accomplishment to aim for greater heights of knowledge and fulfilment.

## **ACKNOWLEDGEMENT**

I wish to sincerely thank all those who contributed to the successful completion of this project. To my Supervisor Gerald Ondiek for his able guidance and advice to make this project a success.

To my parents of their moral and spiritual support they accorded me during this period. I am greatly indebted to the management of County Government of Kisumu for their assistance and cooperation.

Most of all, I thank the Almighty God for His endless wisdom and strength which enabled me to complete this project successfully.

## **ABBREVIATIONS AND ACRONYMS**

|                |   |   |
|----------------|---|---|
| <b>Auto ID</b> | - | Automatic Identification                            |
| <b>EDI</b>     | - | Electronic Data Interchange                         |
| <b>ERP</b>     | - | Enterprise Resource Planning                        |
| <b>ICT</b>     | - | Information Communication Technology                |
| <b>IFMIS</b>   | - | Intergraded Financial Management Information System |
| <b>KEMSA</b>   | - | Kenya Medical Supplies Agency                       |
| <b>SCM</b>     | - | Supply Chain Management                             |
| <b>SCRM</b>    | - | Supply Chain Risk Management                        |

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## ABSTRACT

Supply chain management has recorded a great success as a competitive tool to many organizations globally. Stakeholders in the supply chain regularly demand for effective and efficient service delivery. Owing to the liberalization of economies, the business environment has become intricate because of the risk factors dominant in the market, especially within the supply chain. The objective of the study was to establish the impact of supply chain risk management practices on the performance of County Government of Kisumu. The research design was a case study of County Government of Kisumu. The data collection tool was an interview guide. Content analysis was used to analyze the qualitative data collected by conducting interviews to the respondents and secondary data obtained from the County Government of Kisumu. According to the interviewees, it seems there was a relationship between supply chain risk management practices and the performance of the organization, there was no strategic plan of the organization, the organization did not have a risk management committee, there was no risk management policy, guidance on risk identification was not offered, financial health analysis was being done in the organization, performance measures were not adequately communicated, risk evaluation was not carried out, internal risk control framework did not exist. The study recommends that the management should support the implementation of supply chain risk management strategies and practices in the organization by approving budgetary provision for them. The management should also prepare risk management policy and to consider forming risk management committee.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

Risk management in the supply chain has been a key area of concern to organizations universally because of several industry changes. The current global economic crisis reveals the need for ensuring proper risk management practices within the organisations. Felea and Albastroiu (2013) argue that risk is present in entirely all the departments of the organisation. However it was noted that supply chain management is still a new notion that most organizations, particularly the governmental agencies such as county governments, have not embraced. A risk based management control system allows managers to react promptly to opportunities and threats (Berinato, 2004). Institutional managers must be able to demonstrate the ability to deal with frequent and abrupt changes that confront their activities across the global economy (Bernstein, 1996).

This study will be anchored on the following theories; Agency theory, Stakeholder theory and new institutional economics theory. Supply chain risks significantly impact on many organizations (Chopra and Sodhi, 2004). Chopra and Sodhi (2004) noted the case of Erickson as well known in this regard where fire burnt down most of their plants and equipments. Further, the catastrophic flooding in Thailand affected their operations and supply chain. (Chopra and Sodhi, 2014). Hence, supply chain risk management should focus on coordination or collaborations amongst the supply chain stakeholders to achieve good performance within the organization.

It is believed that countries including Kenya face risk challenges across all sectors. Organizations face several risks that pose threats to their performance and success. The recent enactment of devolution laws in Kenya led to the formation of County Governments, Kisumu County Government being one of the 47 County Governments in Kenya. This has subsequently resulted to the establishment of the devolved functions including supply chain management whose performance is critical within the county government.

Kisumu is the headquarters seat of the County Government of Kisumu and is a principal city of Western Kenya. Kisumu is situated at an altitude of 1131m with direct access to the Winam Gulf which leads to the vast expanses of the rest of Lake Victoria covering a total area of 6800km<sup>2</sup> making it the largest fresh water Lake in Africa and the second largest in the World. Kisumu is the third biggest city in Kenya and for the last 20-30 years, the town has experienced tremendous growth both in population and infrastructure development which has made it to be an economic hub of East and Central Africa. County Government of Kisumu is uniquely composed of the executive, the City Board and the County Assembly of Kisumu making it different from other County Government entities in Kenya.

### **1.1.1 Supply Chain Risk Management Practices**

As aforementioned, supply chain risk management (SCRM) is concerned with the management of risks in the supply chain (Brindley, 2004). Therefore, SCRM is regarded as a strategic management function in the organisation since it influences organizational performance (Tang, 2006). Areas of concern in the management of risks in the supply chain include business environment, customers, products/services and suppliers.

The basic risks arising from selected uncertainty within internal and external sources are; available capacity, information delays, customs regulations, competitor action, internal organizations, price fluctuations, and supplier quality and manufacturing yield (Cucchiella & Gastaldi, 2006). An organization's supply chain involves activities which facilitate the movement of information and materials to the final customer.

Ju (2005) also contends that supply chain susceptibility has the propensity of risk sources and drivers which outweigh risk-mitigating strategies, hence threatening its objective to serve the customer effectively. Consequently, supply chain risk management practice aims at identifying risks, evaluating and controlling risks and implementing necessary measures to manage them (Narasimhan and Talluri, 2009). According to the Institute of Risk Management (2007), risk management involves the identifying, evaluation and implementation of strategies to manage those potential risks. It is believed that businesses that have identified their risks are well positioned to efficiently and effectively manage them.

SCRM literature has identified some major SCRM practices adopted by various organisations to mitigate supply chain risks. These include: risk management policy, computerized supply chain management system, establishment of supply chain risk management committee and enhanced supplier relationship management (supplier appraisal) (Chemoiwo and Karanja 2016; Partida 2015; Cherono and Juma 2014; Yatim 2010). Thus, the study will seek to identify the supply chain risk management practices employed by the County Government of Kisumu.

### **1.1.2 Organizational Performance**

Organizational performance is a concept that cuts across all the departments within an entity, including the supply chain management. The individual performance of the various departments, such as finance, human resource, marketing and the supply chain, in the organization works collectively in enhancing the overall performance of the organization. Furthermore, it is believed that governmental and non-profit making organisations also benefit from performance measurement (Van Der Stede, Chow and Lin, 2006).

According to Tomazevic (2015), most government organisations endeavour to succeed by offering more timely and efficient operations with high quality services and better human resource management tools while reducing costs and improving stakeholder relationship. Therefore, organisations' performance measures model should include service delivery, project implementation, value for money and employee satisfaction as its main variables.

### **1.1.3 County Government of Kisumu**

The recent enactment of devolution laws in Kenya led to the formation of County Governments, Kisumu County Government being one of the 47 County Governments in Kenya. This has subsequently resulted to the establishment of the devolved functions including supply chain management whose performance is critical within the county government. Kisumu is the headquarters seat of the County Government of Kisumu and is a principal city of Western Kenya.

Kisumu is the third biggest city in Kenya and covers a total area of 2085.9 km<sup>2</sup>. For the last 20-30 years, the town has experienced tremendous growth both in population and infrastructure development which has made it to be an economic hub of East and Central Africa. County Government of Kisumu is uniquely composed of the executive, the City Board and the County Assembly of Kisumu making it different from other County Government entities in Kenya.

## **1.2 Research Problem**

Supply chain risks contribute substantial threats to organisations since they are believed to account for an average of 40% drop in long-term performance of most organisations (Grotsch et al., 2013). They argue that even companies which report minor supply chain hitches face a 10% negative return on their performance. Therefore, there has been an increasing concern regarding supply chain risk management and internal control systems within organisations. However, supply chain management within the county governments have been facing challenges such as managing their suppliers, inventory and maintaining safety and quality.

The report of the Auditor – General on the financial statements of County Government of Kisumu which was undertaken during the period 1<sup>st</sup> July, 2013 to 30<sup>th</sup> June 2014 to assess adequacy and reliability of the systems of management and financial controls instituted by the management of the County Government in running its affairs with emphasis on the utilization of public resources highlighted, non compliance with the Public Procurement Act 2005 in process of acquisition of goods and services and Public Finance Management Act 2012 in the utilization of public funds which expose the County Government to supply chain risks.

In the subsequent financial year ending 30<sup>th</sup> June, 2015, the situation worsened with the Auditor – general not being able to express an opinion as he was unable to assess the risks apparent in the County Government of Kisumu due to failure of the County Government to provide documentations to support the procurement and financial transactions hence provided a disclaimer of opinion based on several risk factors which include lack of confirmation of propriety of expenditure and possibility of not achieving value for money. ([www.kenao.go.ke](http://www.kenao.go.ke) , 2014/2015 & 2015/2016).

In addition, an increasing amount of empirical evidence shows that proper supply chain risk management contributes to competitiveness and contributes to organization's financial performance and economic growth (Evans and Carson, 2005). However, uncertainty regarding the impact of supply chain risk management and the performance of County Governments supply chain has created a research gap.

Literature in this area has not yielded much fruit since most of the studies on supply chain risk management have focused on its relationship with performance of organisations in the private sector, for instance Mutua (2014) did a study on Supply Chain risk management and performance of hotels in Kenya, Ngugi (2013) did a study on supply risk management practices in mobile telecommunications sector industry in Kenya.

However, Kisaka (2014) did a study on managing supply chain risks within the state a department of agriculture in Kenya, which falls in the government sector but focused on the department of agriculture. All these studies did not establish the impact of supply chain risk management on performance of the County Government of Kisumu. This creates a gap in literature that the study seeks to fill.

Therefore the study attempts to answer the following questions: What are the supply chain risk management practices employed by County Government of Kisumu? How do supply chain risk management practices impact on the performance of County Government of Kisumu?

### **1.3 Objective of the Study**

The main objective of the study was to establish the impact of supply chain risk management practices on performance of County Government of Kisumu.

### **1.4 Value of the Study**

The study will be useful in providing background information to other researches and scholars who may want to carry out further research in this area of supply chain risk management. It will contribute to the supply chain body of knowledge and risk theoretical framework as it will add to the conceptualization and operationalization of supply chain risk management practices in an organization.

The findings of the study will enable the management of the County Government of Kisumu and practitioners to adopt appropriate supply chain risk management practices to improve organizational performance. It will also help them to design strategies of mitigating risks in their organizations.



The policy makers will obtain knowledge on the supply chain risk management practices and their influence on the performance of organizations and get guidance from this study in forming policies that will help in regulating the supply chain field. The government will also use the findings in the review of the public procurement and Asset Disposal Act 2015 in light of managing risks within the Supply chain and to inform the regulations that operationalize the Act.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter focuses on the review of previous studies that had been done by other researchers on supply chain risk management and performance. It provides conceptual framework and also discusses theories on organizational risk management.

### **2.2 Theories underpinning the Study**

The study was anchored on agency theory, stakeholder theory and new institutional economics theory.

#### **2.2.1 Agency Theory**

According to Ross (1973), who is the main proponent of agency theory, agency relationship arises between two or more parties when one is designated as “the agent” and acts for or on behalf of another party who is designated as the “principal”.

Eisenhardt (1989), argued that literature describes the risk sharing problem as one that arises when cooperating parties have different attitudes towards risk. He noted that agency theory broadens the risk sharing literature to include the so called agency problem that occurs when cooperating parties have different goals and divisions of labour. The theory spreads the organizational management to include ownership and control by shareholders and control by management. Moreover, under corporate risk management, it is believed that agency issues have influence on managerial attitudes toward managing risks (Smith and Stulz 1985). This theory explains the disparity of interest between shareholders, management and debt holders because of different levels of their earnings.

State officers are agents of the government and their actions or decisions can result to the organization taking too much risk or engage in projects of negative net value hence agency theory implies that defined hedging policies against risks can have great influence on organizational value (Fite and Pflleiderer, 1995). Stakeholders theory provides a new insight into possible rationale for risk management in order to improve organizational performance by being sensitive to expected costs of financial distress and loss of good will caused by poor risk management practices from the viewpoint of stakeholders such as the Government, customers and the organization itself. (Judge, 2006).

According to (Froot, Scharftein and Stein, 2013), (Smith and Watts, 1992) assert that regulation is a key determinant of an organization's financial policy. Therefore if regulated organizations such as the County Governments face tighter scrutiny and lower contracting costs then they are less likely to use derivatives to hedge organizational risk. Agency theory therefore is relevant to this study because of the risks that arise between the management of the County Government of Kisumu and the public who are the owners of the resources they manage.

### **2.2.2 Stakeholder Theory**

The main proponent of the stakeholder theory, Freeman (1984), describes what managers in respect to relationships with other stakeholders do and what the outcome that arises out of the adherence to stakeholder's management principles.

Bebbington. J. et al (2008), “contends that reputation of the organization is at risk in every day interaction between the organizations and their stakeholders, with risks having many sources such as strategic, operational, compliance and financial hence must be managed in order to improve organizational performance”. Stakeholder theory focuses on the balance of interests of the stakeholders in the organization. In some organisations, especially within the service industries, the value of the organization depends largely on the consumer trust and loyalty. Hence, corporate risk management practices may lead to a decrease in the expected costs and increase an organisation’s performance (Klimczak, 2005).

Stakeholder theory is therefore relevant to this study because the actions of the management of County Government of Kisumu and how they manage their relationship with various stakeholders inform the strategies of managing the risks that arise within the organization

### **2.2.3 New Institutional Economics Theory**

According to proponent of New Institutional Economics Theory, Williamson O.E, (2000), “institutions are very complex and much of the past organizational theories lack scientific ambitions to deal with the complexities and risks in the organizations”. He noted that there should be many instructive lenses for studying complex institutions; hence pluralism is what holds promise for overcoming institution issues such as risk management.

New institutional theory states the performance of the organization is caged by the risk management practices it adopts. (Williamson, 1998). Further, the theory links security with purchase of property hence supports this notion that risk management can be useful in contracts in the supply chain.

Public organisations do not often give top management the opportunity to make corporate investment and financing decisions. Smith and Watts (1992). “Contends that regulation is an important factor an organization should consider while making corporate financing policies”. New Institutional Economics is therefore relevant in this study since it recognizes the complexities and risks within the organization and which affects its performance.

### **2.3 Supply Chain Risk Management**

This is a process of handling risks either by proactively mitigating them or by reactively responding to them (Chopra and Sodhi, 2004). According to Brindley (2004), "Supply chain risk management is the management of supply chain risks through coordination or collaboration among the supply chain partners so as to ensure profitability and continuity".

SCRM is regarded as a key management function in organisations since it influences organizational performance (Tang, 2006). In consideration of the certainty that not all the environmental factors that affect an organisation can be managed, it will be necessary for an organisation to understand the prevailing information on the basis of which probabilities present is formed in more or less imperfect way.

Cousins, (2004) identify financial losses, product quality reduction, loss of goodwill amongst supply chain stakeholders and damages to properties as some of the consequences of ineffective management of risks. Mitchell (1995) points that collaboration with suppliers, building of partnerships, strategic alliances and supplier development and appraisal help in the reduction of risks.

## **2.4 Supply Chain Risk Management Process / Practices**

Some organisations have traditionally entrusted managers to manage such risks that face them (Shimpi, 2001). Jorion (2001) posits organizations can succeed if they acknowledge risks and manage them properly. For effective management of risks, the organization's top management support is paramount.

Organizations will therefore be advantaged to establish risk management practices to mitigate various risks facing the organization. According to Kersnar (2009), the formal process of managing risks includes; risk identification, analysis, evaluation and control.

### **2.4.1 Risk Identification**

According to Simmons (2000), "the definition of the business objectives is a crucial initial step towards mitigation of risk because if any organization does not know where to go it is difficult to identify what risks may arise". Further as noted by Kersnar (2009) the risk identification process should try as much as possible to remove ambiguity, discord, disagreements and other vagueness as possible.

It was further observed by Gates (2006), internal auditors or functional heads use the interviewing / focus group techniques and stated that risk analysts in companies do not use the modern tools to analyze risks which may result because of lack of awareness or skills.

### **2.4.2 Risk Analysis**

After an organization has identified its problems, the next stage in the risk management practice after the organization has identified the risk is to analyse organization risk exposure. (Berinato, 2006), risk analysis involves a brainstorming session and will entail analysis of the institutional strengths, weaknesses, opportunities and threats in order to come out with effective analysis for the strategic risks. In an effort for an organization to evaluate the effect of the risks on asset values and economic performance analysis of potential benefits from different risk mitigation efforts and need for risk transfer and financing arrangements will have to be determined (Berinato, 2006).

Gates (2006), states that “the next step is to determine risk priorities, both for the company and for the business unit by using a risk mapping technique. This process is done before considering the mitigation of risks resulting from internal controls or other risk mitigation methods such as: insurance, risk avoidance or accepting risk are adopted”.

The environment should be considered after mapping the risks with the existing the corporate strategy and those risks that could impede achieving stated goals and objectives. The organization should then decide on what controls are in place that could mitigate the risks and what controls would be needed if they were not yet adopted (Jorion, 2001).

### **2.4.3 Risk Treatment**

Risk treatment involves identification of the range of options for treating risk, assessing those options, preparing risk treatment plans and implementing them. Shimmel (2002) asserts that “the options available for the treatment of risks include: to retain / accept the risk; if after controls are put in place, the remaining risk is deemed acceptance to the organisation, the risk can be retained. The likelihood of risk occurring can be reduced by preventive maintenance and compliance programs, supervision and contract conditions”.

“Risk can also be treated by reducing the consequences of the risks occurring through contingency planning, contract conditions, disaster recovery and staff training. Risk can also be transferred to another party by use of Insurance and outsourcing. Risk can also be avoided by deciding not to proceed with the activity which can generate it”. (Berinato, 2006).

### **2.4.4 Risk Evaluation and Control**

According to Gupta (2009), “formal strategy process resemble the risk management process by including a strategic control element whereby organizations are supposed to monitor performance outcomes against intended strategic goal to ensure that corporate activities remain on track”.



However, SCRM literature has identified some major SCRM practices adopted by various organisations in the process of mitigating supply chain risks. These include risk management policy, computerized supply chain management system, establishment of a committee to manage risks, enhanced supplier relationship management (supplier appraisal) (Chemoiwo and Karanja 2016; Partida 2015; Cherono and Juma 2014; Yatim 2010).

#### **2.4.5 Risk Management Policy**

Risk management policy document is an official written policy document which is important in managing risks in the organization in the supply chain, the potential risks in the organization and the strategies to manage them (Bowden, Lane and Martin, 2007).

Cherono and Juma (2014) also highlights that risk management policy should include the concepts of risk, the management's preparedness to manage risks and their responsibility. In addition risk management helps the organization to analyse, treat, evaluate and control and monitor risks within the supply chain department (Thun and Hoening, 2008).

#### **2.4.6 Computerized Supply Chain Management System**

Most organizations are apprehensive with the use of computerised supply chain management systems in reduction of risks that can impact negatively on the day-to-day operations (Partida, 2015). According to Varma and Khan (2015) the use of Information and Communication Technology (ICT) is greatly embraced by organizations' but has also generated a lot of ICT risks.

According to Varma and Khan (2015), the major computerised supply chain systems used for mitigation of risks within the organisations include Automatic Identification (Auto ID), Electronic Data Interchange (EDI) and Enterprises Resource Planning (ERP) systems. In addition, governmental organisations in Kenya, such as county governments, have adopted an Integrated Financial Management Information System (IFMIS) which is used to manage risks (Miheso, 2013). Hence, the objective of computerised supply chain management systems to reduce risks in the supply chain.

#### **2.4.7 Risk Management Committee**

Risk management committee has become an important part of an organization. The process of involving the organisation's board of directors in risk management, through the risk management committees, helps in reduction of the organizational risks. Therefore, organisations that have established risk management committees are able to detect and control risks effectively (Yatim, 2010).

Audit committees play a big role in managing organizational risks and should be complemented with an established audit department. Therefore, an organisation should establish a risk management committee to add synergy into the whole risk management process to enhance organizational performance (Hermanson 2003; Selim and McNamee 1999).

### **2.4.8 Supplier relationship management**

Supplier relationship management improves the management of supply chain risks and uncertainties (Lavastre, Gunasekaran and Spalanzani, 2014). Hence a better supplier relationship management enhances supply chain risk management and organisational performance.

The key elements of supplier relationship management (supplier appraisal) are supplier visits done when choosing a supplier, approving vendor list which is made available to purchasing departments to ensure that the suppliers are qualified, vendor rating usually done in ranking the supply performance and ensuring ISO certification of the suppliers (Chemoiwo and Karanja, 2016).

## **2.5 Organizational Performance**

Organisation's performance is a multidisciplinary which is majorly influenced by many variables and theories. At the strategic level the organization performance is based on organizational theory, systems theory and contingency theory.

Organizational theory focuses on the entire organization and its structure (Jones, 1995). The dominant management paradigm is the prevailing way of perceiving, thinking and doing things based on contingency management (Wooton, 1977). Contingency theory of management involves situational analysis and actions which integrates diverse forms of knowledge within the organisation into effective strategies of management (Tosi and Carroll, 1976).

Systems theory opposes reductionism and promotes holism (von Bertalanffy, 1973). It focuses on the relationship between the parts which connects them into a whole (Flood and Jackson 1995). Therefore, systems theory of organisational performance considers organisations and departments within them as open systems which freely interact with each other and the environment.

Organisation performance models have been growing rapidly in the current dynamism (Tomazevic, Tekavcic and Peljhan, 2015). Furthermore, it is believed that organizations such as governmental and non-profit making organisations must focus more on their performance by eliminating and managing risks well (Van Der Stede, Chow and Lin, 2006).

According to Tomazevic (2015), most government organisations strive to succeed in satisfying customers by offering timely and efficient operations with high quality services, improving employee satisfaction and enhanced relationship with stakeholders. Performance measures model should include service delivery, project implementation review, value for money and employee satisfaction as its main variables. Boyle (2000) also argues that the performance management system for public organizations emphasizes on three main Perspectives of performance i.e. service delivery; value for money; and employee satisfaction.

### **2.5.1 Service delivery**

Service delivery emphasizes on knowing the expectations and needs of the customer and satisfying them. Quality services, as emphasized in report of Better Local Government (1996), stresses on the need to provide high quality services with the available resources of the organization.

Lewis, Mcculloch and Sacks (2016) argued that the best performance measure for central and local governmental units should have three major characteristics, which include accessibility, reliability and validity. They acknowledged that governmental units mostly use service delivery as one of the plausible indicators upon which performance and incentive-based programmes are measured. Lewis, Mcculloch and Sacks (2016) indicated that there are reliability and validity concerns related to the use of service delivery as a measure of performance within governmental organisations. However, it is still believed that improvement of quality of service delivery is vital towards enhancement of organisations' performance for organisations that mainly offer services (Swar, 2012).

### **2.5.2 Value for Money**

Under value for money, the organization is expected to procure assets or provide services that have meaningful value and a justifiable and reasonable cost that can be accepted by the resource controller (Boyle, 2000). According to Local Government Report (1996), it is important for organizations to have proper financial management systems that ensure good use of funds and resources for them to perform better. Therefore, value for money is one of the popular public sector performance measures.

Currently, most public sector organisations focusing on the economic performance measures, such as accountability for outcomes and value-for-money, have realised meaningful changes within their communities (Green and Dalton, 2016). In an environment with a lot of public sector reforms and a renewed government commitment to enhanced performance, most government organisations are actively engaging on several income-generating strategies to achieve and maintain economic sustainability which ensures value-for-money as a measure of performance.

### **2.5.3 Employee Satisfaction**

Human resources management focuses on developing organizational performance indicators from the employee perspective (Boyle, 2000). This calls for closer look at the performance of internal processes and emphasizes the need motivating employees to achieve organizational results. In addition, Better Local Government, (1996) report stresses the importance of motivating employees through involvement and training for the organization to achieve its objectives.

The limitations of financial performance measures have made many public sector organisations to pay more attention to nonfinancial measures, such as employee satisfaction, which may cover a wider organisational perspective, focus on long-term prospects and varied scope of managerial performance (Tan and Lau, 2012). Therefore, there has been an increasing prominence on the use of employee performance indicator as a nonfinancial performance measure within most organisations since it largely affects the attitudes of employees on how they perceive fairness, contentment on job and commitment towards the organisation.

### **2.5.4 Project Implementation**

Project management is the application of knowledge to the activities of a project so as to achieve the expectations of stakeholders (PMI, 1994). Seymour et al. (1992) defines project implementation as a key strategy that organisations use to succeed while undertaking a project under environmental challenges and risks.

Omar and Fayek; (2016) “noted that organizations that engage in the implementation of projects have faced several uncertainties caused by the constraints of budget, modern technology and development processes hence project implementation is as a result of integrated processes and activities”. They described the measurable events and interactions that inform different levels of performance as project implementation. They recognized project implementation as one of the measures which frequently used to evaluate performance of organization and on project levels.

## **2.6 Supply Chain Risk Management and Organizational Performance**

Studies have been done on supply chain management practices that organizations adopt. However, few have attempted to discuss the impact of supply chain risk management practices on organizational performance. The following global studies that relate to this study have been done; Flovian and Constangioara (2004) did a study on the impact of risks in supply chain on organizational performance in Romania.

They found out that it was important to develop adequate SCRM strategy in order to improve organizational performance. They suggested that at National level, it was necessary to develop a formal SCRM strategy and to avoid risky areas. They noted that management should implement changes in order to deliver value for the stakeholders, expand, build up capabilities and scale up improvements to manage organizational risks. Sosa, Alcaraz and Torres (2014) studied the effect of some of risk factors in the supply chains performance, A case of study in Mexico. They indicated that the demand which they considered as an independent factor has a direct positive relationship with suppliers, politics and manufacturing factors.

As a result, the suppliers had an effect on the flexibility factor and the flexibility had a direct positive relationship with the customer service factor. Their results indicated that the infrastructure factor does not have any relationship with the other factors assessed. They observed that their study had implications for researchers and practitioner in the manufacturing sector in that it allows evaluating risk activities that have negative effect on the performance of supply chain in manufacturing export companies in Mexico.

Abdala, Okeidat and Aqqad (2014) researched on the impact of supply chain management practices on supply chain performance in Jordan. They found out that internal integration, information sharing and postponement significantly and positively affect supply chain efficiency performance and supply chain effectiveness performance. However, they observed that supplier and customer integration does not affect supply chain efficiency and effectiveness performance.

Berg, Knudsen, Norman (2008) did a study in Sweden on assessing performance of supply chain risk management programmes – a tentative approach. They found out that in a supply chain setting, it was harder to assess what type and level of risk an organization is prepared to take since the amount of risk an organization is prepared to take is related to what type of business model the organization operates under and what kind of risk leadership is present in the organization. They also found out that people are very critical in the process of managing risks in the organization thus it is important to assess whether people are aware of the supply chain context and whether they are using risk management tools and techniques to work with suppliers.



Regionally, the following studies have attempted to discuss the literature related to this study. Mohamed (2015) did a study on supply chain risk management at Pharco pharmaceuticals, a pharmaceuticals manufacturer in Egypt.. He found out external risks were perceived to be more significant than internal risks. The research also revealed that there was no clear strategy deployed by the company to mitigate most of its supply chain risks.

Toyin (2012) did a study on supply chain management practices in Nigeria today: Impact of SCM performance. The study revealed that SCM practices had an impact on the performance of supply chain management performance.

Agorzie, Monday and Adermi (2017) did a study on supply chain risk factors Assessment in the Nigerian Pharmaceutical Industry. The study examined their impact level and measured their criticality so as to prioritize those risk factors. The study revealed that pharmaceutical firms in Nigeria are better equipped to manage and mitigate risk factors in their supply chain. In Kenya, some studies related to this study had been discussed. Amemba (2013), studied the effect of implementing risk management strategies on supply chain performance; A case of Kenya Medical Supplies Agency.

The study revealed that the level of implementation of risk management strategies in the KEMSA supply chain was medium and that risk identification, risk analysis and evaluation and risk control and monitoring strategies that were implemented in the KEMSA supply affected the performance to a great extent.

The study recommended that KEMSA should implement risk management strategies proactively at the planning stages of supply chain and to ensure that there was a joint participation with all supply chain partners in the strategy implementation.

Cherono and Juma (2014) did a study on the Analysis of the significance of risk management practices in supply chain performance in Kenya; A case study of County Government of Kericho. The study concluded that risk management practices are positively correlated with supply chain performance in Kericho County.

Munyuko (2015) did a research on the effect of supply chain risk management on organization performance; A case of Andy Fowarders Services Limited. She found out that there was a direct link between supply chain risk management and organizational performance. The study therefore concluded that supply chain risks affect organization performance in the event they materialize and that there was need for the organization to identify risk exposures, analyze risk exposure and put in place plans to mitigate the risks identified within their supply chain.

## **2.7 Summary of Knowledge Gap**

The study has been anchored on the concept of supply chain risk management practices within the context of the County Government of Kisumu, with specific references on risk management theories which include Agency theory, stakeholder theory and New Institutional Economics theory.

Most of the researches have conducted studies related to supply chain risk management practices and organizational performance. However, they were different in some aspects to this study. Flovian and Constangioara (2004) did a study on impact of risks in supply chain on organizational performance but within the context of Romania while this study focuses on the impact of supply chain risk management on the organizational performance in a Kenyan context.

Sosa, Alcaraz and Torres (2014) focussed on the effect of some risk factors in the supply chain performance in Mexico while this study concentrates on the impact of supply chain risk management on the organizational performance as a whole. Abdala, Obeidat and Aqqad (2014) researched on the impact of supply chain management practices on supply chain performance in Jordan but did not specifically deal with supply chain risks management practices which this study sought to establish.

Berg, Knudsen and Norman (2008) assessed the performance of supply chain risk management programmes but did not relate it to organizational performance. Mohamed (2015), Agorzie, Monday and Aderemi (2017) assessed the supply chain risk factors but did not discuss the supply chain risk management practices that could mitigate those risks. Amemba (2013), Cheronon and Juma (2014) attempted to analyze the effect of supply chain risk management strategies on supply chain performance but not on the organizational performance.

Munyuko (2015) came closer to this research by finding out the effects of supply chain risk management on organizational performance but focussed on the case of Andy Forwarders Services Limited which is a private company while this study sought to establish the impact of supply chain risk management practise on organizational performance, a case of County Government of Kisumu which is a public organization.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter presents the research methodology that was used to carry out the study, what informs the selection of the research design, data collection and how data was analysed.

### **3.2 Research Design**

Case study research design was adopted in this study. According to (Yin, 1981), “A case study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident”. “It is a research strategy preferred when “how” or “why” questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real life context.” (Yin, 1981).

In this case is relevant in achieving the objective of the study since the findings are expected to give an insight and in-depth understanding of supply chain risk management practices put in place and their impacts on organizational performance.

### **3.5 Data Collection**

Primary data was collected through face to face interview with the interviewees. An interview guide was used to collect data since it allows gathering of detailed information from the interviewees. Secondary data was also used to verify the validity and reliability of the information provided by the interviewees through the interview. Documents such as the budgets, procurement plan, audit reports and organogram were reviewed by the researcher to assist in the verification of the data provided by the interviewees.

The same interview guide was used to get data from the two interviewees to confirm reliability of the information. The interviewees were the Director of supply chain management services and the Director of audit services who the researcher believes have relevant knowledge that pertains to this study. The Directors were also the key persons responsible for the development, implementation and evaluation of the supply chain risk management practices in the organization.

### **3.6 Data Analysis**

The data contained in the interview guide was analyzed using qualitative analysis. The qualitative analysis was done using content analysis which helped the researcher to observe and have detailed description of items that constitute the object of the study. The themes used in the analysis were classified into two; supply chain risk management practices and organizational performance parameters.

The responses captured from the both the Director of supply chain management services and the Director of audit were analyzed with a view of identifying the supply chain risk management adopted by the County Government of Kisumu and how they impact on its performance.

## **CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSION**

### **4.1 Introduction**

The research objective was to establish the impact of supply chain risk management practices on the performance of County Government of Kisumu. This chapter therefore presents the analysis, findings and discussions in respect to the objective.

### **4.2 Interviewees' Profile**

This section of the interview guide focused on the academic and professional qualification of the interviewees. It also established their work experience which informed their ability to respond to the questions on the supply chain risk management practices and their impact on the performance of the County Government of Kisumu.

The researcher interviewed two senior officers; the Director of supply chain management services and the Director of Audit both from the County Government of Kisumu who were the interviewees. The Director of supply chain management services had a Master degree in supply chain management with a professional qualification of chartered institute of procurement and supplies and the Director of Audit had a bachelor of commerce degree and holds CPA (K) and CPS (K). The researcher believes that with the academic and professional background that the interviewees possess, they were able to respond to the questions accordingly.

The Director of supply chain management had a work experience of 10 years while the Director of Audit had a work experience of 15 years. The Director of supply chain management's job description was to coordinate the supply chain management functions and to oversee the effective implementation for the public procurement and Asset Disposal Act 2015, its accompanying regulations and procurement circulars.

The Director of Audit's job description was overseeing all the internal audit functions and assessing compliance with systems of internal control and reporting. The researcher believes that with all the above qualifications of the interviewees, they have the requisite knowledge on study area and would be great assistance in realizing the objective of this research.

The researcher reviewed the following documents to get more information and for verification purposes. The County Government budget books, the Auditor General's reports, inspection and acceptance committee report, public procurement and Assets Disposal Act 2015, Public Finance Management Act 2012, County Integrated Development Plan, stores balances reports, project status reports and evaluation committee minutes.

### **4.3 Supply Chain Risk Management Practices Exposure**

In this section, the interviewees were to give their opinion on what risks the County Government of Kisumu is exposed to since it was paramount for the organization to know the risks it faces that could hinder it from achieving the set objectives. The interviewees agreed that risk management was important in defining the organization's objective and ensuring efficient and effective management of public resources.

They noted that some of the supply chain risks that the County Government was faced with were:- bid rigging, collusion between supply chain management officers and suppliers and contractors, delay in deliveries, procurement risks, reputational risks, financial risks and conflict of interest.

In responding to the question of which risks identified by them constitute the greatest risk, they observed that financial risk, conflict of interest, reputational risk and procurement risk constitute the greatest risk. They justified that these risks affect the organization as a whole and have an effect on both the employees and the stakeholders such as the suppliers, contractors and the Government.

They noted that the organizations vision and mission guide the achievement of the organization's objectives. They unanimously agreed that since the organization should align its strategies with the vision and mission, there was a direct relationship between risk management which is done under several uncertainties as the organization strive to achieve its objectives to perform. They observed that as the Kisumu County Government tries to meet its objectives by offering better service delivery to the citizens, it is also exposed to several risks.

It is important that the management of an organization must be committed to and supportive when implementing strategies which also includes risk management. The interviewees indicated that the management of Kisumu County Government has not demonstrated support and commitment towards risk management. This was confirmed from the budgets of the Kisumu County Government for the financial 2013/2014 upto 2017/2018, where there was no budgetary provisions for risk management by the management save for only budgeting for normal expenses of Audit department.



The interviewees observed that the management of County Government of Kisumu had not established a documented risk management structure and a proper risk management approach to deal with risks especially in the supply chain. They added that the County Government of Kisumu did not have an established position of a risk manager.

This was confirmed in the organogram where there was no such position of a risk manager who is charged with responsibility of managing risks in the organization. The organization puts all their focus on the Internal Audit Department which cannot adequately handle risks in the whole organization. They added that the organization did not even have a risk management policy that guides the employees on risk management.

The strategic plan in any organization covers a specified duration within which it stipulates what the organization intends to do within that time. However, the interviewees stated that the County Government of Kisumu does not have a strategic plan, instead they have a County Integrated Development Plan (CIDP), which only contains projects. This is a cause of worry because strategic issues such as supply chain risk management practices can only be highlighted well in the strategic plan then subsequently rolled on to the County budget.

The Auditor General's report on the financial operations of the County Government of Kisumu highlighted procurement and financial illegalities, inadequacies and unreliability of systems which makes the County Government to lose colossal amount of money. The Auditor General's report of the financial year 2013/2014 and 2014/2015 reported on supply chain risks which were affecting the organization which the researcher can term as procurement and finance risks.

The reports point at the procurements done against budgetary allocation and lack of confirmation as to whether there was value for money for items procured in the case of payment for incomplete works. On whether there was a risk management committee, the interviewees unanimously agreed that the County Government of Kisumu had not formed a risk management committee. The management only relies on the findings and recommendations of the Internal Audit to make decisions relating to supply chain risk which come at the tail end since they are identified much later after audit.

#### **4.4 Supply Chain Risk Management Practices**

Risks must be managed well by the organization so that the set objectives are achieved. Risk management practices such as risk identification, risk assessment, risk treatment, risk evaluation and control must be adopted by an organization for it to perform better.

##### **4.4.1 Risk Identification**

In responding to the question as to who are responsible for identification of risks in the organization, the interviewees said that there was no department that deals with risks thus they were not keen on identifying them. They added that the organization does not give guidance on the risk identification process so there was no formal way of identifying the risks in the organization.

They reported that the organization did not keep a risk dictionary hence there was a problem of risk identification and lack of common understanding on supply chain risks by the departments. This ambiguity is increased when there is no risk registers in place.

They noted that the departments of supply chain and Audit were only making reference to materials such as Public Procurement and Assets Disposal Act 2015 and the Public Finance Management Act 2012. The interviewees stated that the role of the internal Audit department was to ensure compliance to systems and the law and give reports. They added that the County Government adopts a post audit approach after various departments had finished their work.

#### **4.4.2 Risk Analysis**

The interviewees in reacting to the questions on how the organization analyses the supply chain risks in terms of impact and livelihood, reported that the County Government does not analyze the supply chain risks and their impact or likelihood of occurrence. This could be confirmed to be true because there was no risk management committee or risk department to analyze the risks and their impacts on the organization and give necessary recommendations.

They agreed that financial health was being done by the organization through the preparation of financial statements such as revenue and expenditure reports. They added that the actual performance is compared with the various set targets and the variances were analysed by the Audit department so that appropriate actions could be taken to improve the performance of the organization. The revenue and the expenditure of the organization were being factored in the budget so that the funds could be set aside to be used for undertaking the project within the financial year.

The performance measures are done in the County Government of Kisumu through performance contracting and appraisals. However they are not adequately communicated to employees since they are only disseminated during the performance appraisal only. This is not enough since the organization's performance depends upon

the employees as they are the people who perform the organizational activities hence a need for adequate communication. The interviewees further stated that performance contracts were used in the evaluation of employees' performance at the end of the contract period based on the agreed and signed targets at the beginning of the year.

Towards the continuous assessment of supply chain risks, the respondents stated that the County Government was training their supply chain management officers on risk assessment within the supply chain to enable them identify risks in good time and take mitigation measures that are appropriate.

In responding to the question as to whether the supply chain risk management practices improve performance of Kisumu County Government, the interviewees stated that the performance of the organization was measured in terms of revenue collection within a particular financial year and how the revenue is spent. They agreed that the performance of the County Government of Kisumu was also measured in terms of the level of service delivery, the morale of the staff, the level of project implementation, value for money from goods, works or services, the level of supplier relationship management and the supply chain management systems adopted by the County Government.

The interviewees also recognized supply chain risk management practices such as risk identification, analysis, treatment evaluation and control, benchmarking, risk management committees, supplier relationship management, risk management policies and computerized supply chain risk management system as key in improving the organization's performance despite the fact that most of them were not being used by the County Government of Kisumu.

### **4.4.3 Treatment of Risks**

Under treatment of risks, the interviewees agreed that there were no deliberate action on treatment of risks but stated that in reducing the likelihood of the risk occurring, controls such as audit and compliance programs and training of staff are being undertaken. They reported that there were no technical controls like backup generators, off-site backup and recovery.

They added that the risks they deem to be low were retained or accepted by the County Government such as lack of a proper inventory / stores management. The interviewees reported that the County Government was not keen on preventive measures especially on procurement risks. They stated that the County Government treats the supply chain risks through contract conditions which are spelt out in the tender documents and employs the use of insurance to transfer the risk to the contractor or supplier.

### **4.4.4 Risk Evaluation and Control**

This section aimed at the risk evaluation strategies and control mechanisms put in place by the County Government of Kisumu in line with the organization's objectives. The interviewees stated that the County Government does not have an internal risk control framework adopted by the management.

They added that they control supply chain risks through tender evaluation committees that evaluate the bids based on the set criteria. Risk is evaluated by the County Government of Kisumu only after its occurrence. The County Government had put in place a computerized supply chain management system (Integrated Financial Management Information System (IFMIS) to control procurement and financial risks

in the system. They unanimously agreed that the County Government had embraced the segregation of responsibilities through supply chain management committees such as tender opening committees, tender evaluation committees and inspection and acceptance committees which ensure transparency and accountability and also control the procurement risks.

They unanimously agreed that inspection and acceptance committee ensures that the organization gets value for money from goods and services they procure because they would first check on whether the goods, works or services were received and approved for conformity with the specifications before payment was authorized.

The Internal Audit department helps in assessing risks and ensuring compliance with systems of internal control. This makes the organization to reduce unnecessary costs or wastages to avoid unwarranted litigation from suppliers, improved stakeholder confidence when there are less audit queries.

The interviewees reported that the County Government of Kisumu offers staff training and capacity building which help in boosting the morale of employees since they will be equipped with the necessary skills of identifying the risks early enough and come up with the strategies of controlling or mitigating them. The image or the reputation of the organization is also enhanced because employees are the mirror of the organization's health and performance.

#### **4.5 Organizational Performance**

The researcher adapted the following measures of organizational performance for the purpose of this study; service delivery, employee satisfaction, value for money and project implementation.

### **4.5.1 Service Delivery**

In response to the questions as to whether supply chain risk management practices have an impact on service delivery, the interviewees agreed that supply chain risk management practices such as risk treatment and control had a major impact on the quality of service delivery.

Supply chain risk management practices such as the establishment of risk management committee also have an effect on the approval of services to be delivered by the organization. They added that computerized supply chain management systems also ensure that there is faster and efficient service delivery.

### **4.5.2 Value of Money**

In answering the question of whether the organization stands to benefit by getting value of money if they implemented supply chain risk management practices, the interviewees agreed that with the establishment of Internal Audit department, the organization benefits from not incurring unnecessary costs and ensures conformity with the specifications hence the organization realizes value for money.

They also agreed that committees such as Inspection and Acceptance ensure that there is value for money by verifying and confirming whether the goods, services or work meet the set criteria.

### **4.5.3 Employee Satisfaction**

The interviewees in responding to the question of whether they believed that supply chain risk management practices have an impact on employee satisfaction, stated that the use of an efficient computerized supply chain management system boosts the

morale of employees. However, they noted that the County Government of Kisumu does not adequately provide protection gears to staff who work in hazardous environment thus affects the employee performance and subsequently the organization performance.

#### **4.5.4 Project Implementation**

In response to the question as to whether supply chain risk management practices affect the implementation of projects, the interviewees agreed that practices such as supplier relationship management or appraisal contributes to the level of project implementation since performance of the contractors largely depends on their capacity to deliver as per the specifications in the contract. They also concurred that when risks are not identified by the organization, the organization can initiate a project which might be risky, expensive and which may not add value to the organization.

When asked about how they would rate the status of project implemented by the County Government of Kisumu, the interviewees agreed that most of the projects had been affected by supply chain risks such as procurement and finance risks. This was confirmed by the researcher by verifying the project status report for the financial year 2016-2017 for the department of water, environment and natural resources which indicated that out of the twenty eight projects awarded, nine were completed and nineteen were still in progress to date.

Out of the nine projects completed, only two were fully paid. From the department of Green Energy and climate change, the list of pending bills reflect a total of eight projects which rolled from the financial year 2014/2015 to 2016/2017 but had not been paid.



## **4.6 Discussion of Findings**

The findings indicated that the County Government of Kisumu was faced with supply chain risks such as delivery delays, conflict of interest, reputation, procurement and finance risks. Such risks had been identified by Agorzie, Monday and Aderemi (2017) as supply chain risk factors. The study revealed that finance risk, conflict of interest, delivery delays, procurement risk and reputational risk constitute the greatest risk in the organization and affect stakeholders such as employees, suppliers, contractors and the Government.

Agorzie, Monday and Aderemi (2017) measured the criticality of supply chain risk factors present in the Nigerian pharmaceutical but found out that the risk factors with the greatest probability of occurrence were the excess stocking of products and increase of prices by suppliers. However, their finding agreed with the researcher's finding that delivery delays is one of the risk factors that have the greatest impact on the organization.

The researcher found out that the County Government of Kisumu did not have a risk management committee, a supply chain risk manager and a risk management policy. Other supply chain risk management practices such as supplier relationship management to risk identification, treatment, evaluation and controls were also not being adequately embraced by the organization.

Berg, Knudsen and Norman (2008) also appreciate that measures were needed for both the management to identify and evaluate the success of actions taken in supply chain risk management and for the supply chain risk manager to communicate the value of his work.

They also found out that people are very critical in managing risks hence it was important to assess whether people were aware of risk management tools and techniques to manage risks, thus the study sought to establish the impact of supply chain risk management practices on organizational performance on a case of County Government of Kisumu

# **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

## **5.1 Introduction**

This Chapter presents the summary of the research findings, conclusion and recommendations. The conclusions were drawn from the findings of the study in line with the objective of the study by establishing the impact of supply chain risk management practices on the performance of the County Government of Kisumu.

## **5.2 Summary of the Findings**

This study adopted a case study in an effort to establish the impact of supply chain risk management on organizational performance, a case of County Government of Kisumu. The study established that supply chain risk management had an impact on the performance of the County Government of Kisumu.

The interviewees exhibited the requisite knowledge and skills about supply chain risk management having had work experience of over ten years and since they were involved in the coordination of functions within their departments. Their good academic and professional background also made them to be well versed with the subject matter of the research.

The organization was found to be faced with risks such as reputational risks, financial risks, procurement risks and conflict of interest. It was found out that the risks affect the organizational performance through lack of budgetary provision for supply chain risk management which subsequently affect service delivery, project implementation, employee satisfaction and realization of value for money by the organization.

Risk management was not adequately supported by the management through the approval of policy and frameworks hence no clear structure of risk management in the County Government of Kisumu. The internal Audit is the only department that ensures compliance to systems and laws which was also done only after the work was executed.

The County Government of Kisumu does not have a risk management committee which is charged with the responsibility of developing risk management policies and mitigating risks. The County Government does not have a risk management policy which gives guidelines on how to manage supply chain risks. There was no formal process of risk identification in the County Government of Kisumu which causes ambiguity in identifying risks.

The organization does not offer guidance on risk identification. The risks were not categorized based on their impact and likelihood of occurrence and the possible effects to the organization. There was no formal communication of the effects of risks to the employees by the management. The County Government did not have an internal control framework for managing risks.

### **5.3 Conclusion**

The study sought to establish the impact of supply chain risk management practices on organizational performance, a case of County Government of Kisumu. The following conclusions were derived; first the results concerning the impact of supply chain risk management practices on organizational performance are in line with previous research.

The study confirmed that SCRM practices implemented by the County Government of Kisumu have an impact on performance of the organization. The results revealed that the SCRM practices such as risk identification, risk analysis, risk treatment, risk evaluation and control and the adoption of risk management policy, system, risk management committee and supplier relationship management have not been adequately addressed by the organization. The organization was exposed to several supply chain risks such as procurement risks, finance risks, reputational risks and conflict of interest.

Risk evaluation and control would enable the organization to adequately address the risks, evaluate their impact and develop strategies to mitigate those risks. The establishment of risk management committee would also help the organization to coordinate the various activities within the departments with a view of mitigating the risks through best risk management practices. Organizational employees and the management would be satisfied and their morale increased when the objectives and performance measures are evaluated objectively in the organization.

#### **5.4 Recommendations**

The study recommends that the management of the County Government of Kisumu should consider allocating funds in their budgets to enable them effectively manage the supply chain risks from procurement, finance, reputation and conflict of interest.

The management of County Government should provide support towards managing supply chain risks by adopting various supply chain risk management practices such as risk identification, risk analysis, risk treatment, risk evaluation and control, risk management policy, risk management committee and supplier relationship management to improve the performance of the organization.

The absence of a well structured and documented risk management policy could have led to poor performance of the organization which can be confirmed from the many audit queries raised every financial year by the Auditor General on the financial operations of the County Government of Kisumu. The County Government of Kisumu should develop supply chain risk management policies and framework within which the employees would be able to identify, assess, treat, control and evaluate the risks that face the organization.

## **5.5 Limitation of the Study**

The study adopted a case study research design which limited its scope to the County Government of Kisumu only thus the findings and recommendations are only relevant to the County Government of Kisumu and their applicability cannot go beyond this organization.

The other limitation of this study was that only two senior officers were interviewed hence a possibility of not getting reliable information due to interviewees' bias and the researcher's assumptions and interpretation which could affect the outcome of the study.

## **5.6 Suggestions for further research**

The study focused on the County Government of Kisumu. This study should be replicated in other County Governments in Kenya to establish the supply chain risk management practices adopted by them, the impact of those practices on their performance and to draw a comparison on the consistency on the supply chain risk management practices adopted by the various County Governments. Another area that points for further research is that since the study adopted a case study research design which involved content analysis, similar studies should be done by using other research designs.

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## **APPENDIX A: INTERVIEW GUIDE**

The interview will seek to achieve the following objective;

To establish the impact of supply chain risk management practices on the performance of County Government of Kisumu.

The following sections provide sample questions to be used in evaluating the impact of supply chain risk management practices in the County Government of Kisumu.

### **(a) Respondent profile**

- What is your academic qualification?
- What is your professional qualification?
- What is your work experience?
- What is your job description?

### **(b) Supply Chain Risk Management Practices Exposures**

- In your opinion, how important is risk management to your organization?
- What type of supply chain risks is the County Government faced with?
- Which among the ones identified above constitute the greatest risk? Why?
- Is there a relationship between supply chain risk management and the organization's performance?
- Is risk management supported by the top management in Kisumu County Government? Explain.
- Does your organization have a structure and well documented supply chain risk management approach?
- Are supply chain risk management practices highlighted in the Kisumu County Government strategic plan? Explain.
- Is there a risk management committee or a department that works with each reporting department to link the organization's strategy? Expound.

**(c) Supply Chain Risk Management Practices**

**(i) Risk Identification**

- Who are responsible for risk identification in your organization?
- How does the organization identify the risks it is exposed to and do you think the process is adequate? Expound.
- Does your organization give guidance on risk identification process?
- Is there a risk dictionary or any related reference material in the organization?
- Is there a risk management department or Internal Audit in your organization?
- Briefly explain their role.
- Does the County government of Kisumu carry out pre-audit or post-audit?

**(ii) Risk Analysis**

- How does the organization analyse the supply chain risks in terms of impact and likelihood in your organizations?
- Is financial health analysis done in your organization? Explain.
- Is the review of performance measures done in Kisumu County Government?
- How does supply chain risk management practices impact on employee satisfaction?
- Are performance measures adequately communicated to employees? Expound.
- What are the efforts towards continuous assessment of supply chain risks in County Government of Kisumu?
- Does supply chain risk management practices improve your organization's performance? Explain.



**(iii) Treatment of Supply Chain Risks**

- What are the efforts towards treatment of supply chain risks in Kisumu County Government?
  - Retaining / accepting the risk? Explain
  - Reduce the likelihood of the risk occurring by:- preventive maintenance.
  - Audit and compliance programs
  - Supervision
  - Contract conditions
  - Policies and procedures
  - Testing
  - Staff training
  - Technical controls and quality assurance programs e.t.c Explain
  - Reduce the consequences of the risk occurring e.g. through contingency planning.
  - Disaster recovery
  - Off-site backup
  - Public relations
  - Emergency procedures e.t.c
  - Transfer the risk e.g. the use of contracts, Insurance, outsourcing, partnerships e.t.c. Explain
  - Avoid the risk. Explain.
  - How would you rate the project implementation undertaken by the County Government of Kisumu? Expound.

**(iv) Risk Evaluation and Control**

- How are risks evaluated in the organization?
- Is there an internal risk control framework in Kisumu County Government? Expound
- Do the annual financial reports of Kisumu County Government contain internal control reports? Elaborate.
- Has the management of your organization put in place measures such as computerized supply chain management system?

- Explain other supply chain risk management practices adopted by your organization
- Do the supply chain risk management practices mentioned above have any impact on the performance of County Government of Kisumu? Expound.
- Are supply chain risk management practices spelt out in the public procurement and Asset Disposal Act 2015? Expound.
- Are controls of supply chain risk management practices highlighted in the public finance management Act 2012? Expound.
- In your opinion, does the County Government of Kisumu stand to realize value for money if supply chain risk management practices are adopted by them? Explain.

## APPENDIX B: WORK PLAN2017

| ACTIVITIES                                     | July<br>2017 | August<br>2017 | September<br>2017 | October<br>2017 | November<br>2017 |
|--|--------------|----------------|-------------------|-----------------|------------------|
| Development of proposal                        |              |                |                   |                 |                  |
| Development and piloting of instruments        |              |                |                   |                 |                  |
| Data collection                                |              |                |                   |                 |                  |
| Data organization, analysis and interpretation |              |                |                   |                 |                  |
| Typing/editing/report writing/submission       |              |                |                   |                 |                  |

**Source:** Author (2017)

## APPENDIX C: BUDGET

| ITEM            | NO. OF ITEMS | DESCRIPTION                        | TOTAL AMOUNT (KSHS) |
|-----------------|--------------|------------------------------------|---------------------|
| Stationery      | 3            | 3 Reams of photocopy papers        | 300/=               |
|                 | 1            | Flash disk                         | 900/=               |
|                 |              | Writing material                   | 1,000/=             |
|                 |              | Others                             | 500/=               |
| Personnel       |              | Consultancy                        | 1,500/=             |
| Services        |              | Photocopying, Printing and Binding | 5,000/=             |
| Transport       |              |                                    | 4,500/=             |
| Telephone calls |              |                                    | 1,000/=             |
| Surfing Net     |              |                                    | 1,000/=             |
| Miscellaneous   |              |                                    | 1,000/=             |
| <b>Total</b>    |              |                                    | <b>16,500/=</b>     |

**Source:** Author (2017)